

**ABSTRACT**

A method of compressing values of a waveform of a monitored electrical power signal. The method includes of acquiring data representative of periods of the waveform (202), decomposing the waveform of the power signal into a plurality of components, over a plurality of periods of the waveform (sequence steps 204, 206, 208, 210, 212, 214) compressing the values of at least some of the components over a plurality of periods (216), individually. And storing these values and extents (218).